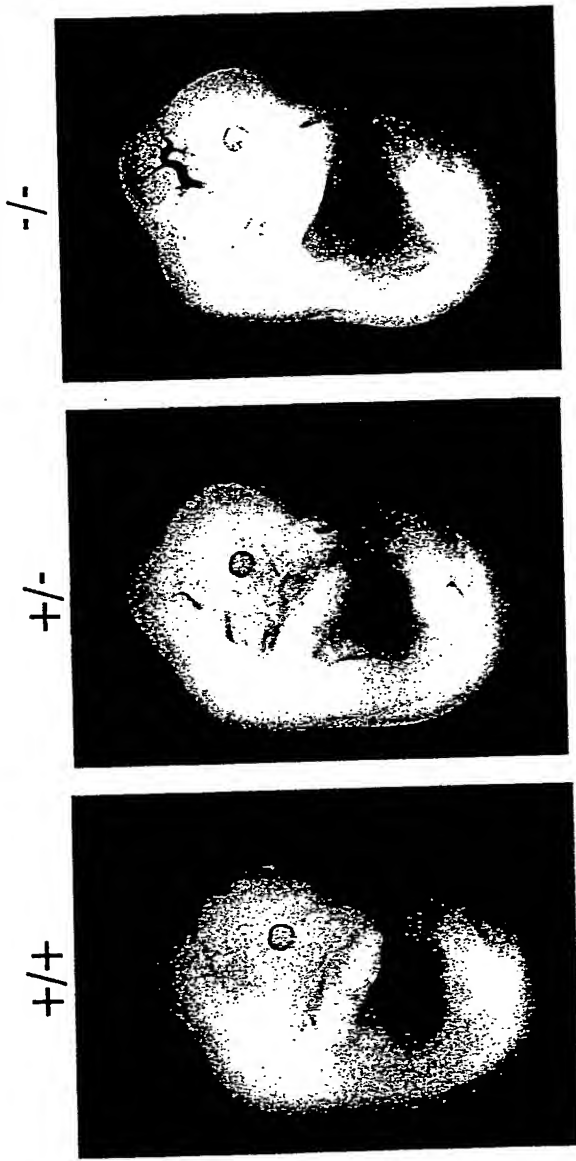




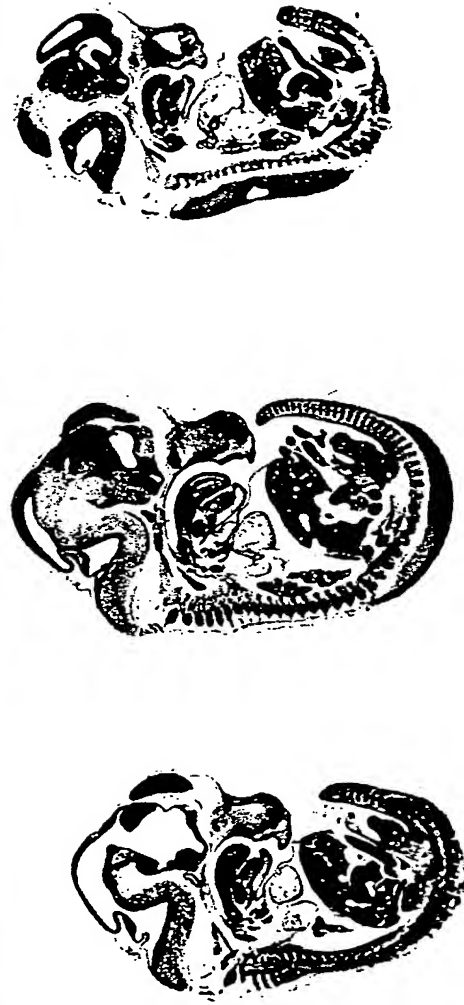
FIG. 2 BIRTH OF SYNOVIOLIN KO MICE

Stage	Total (Litters)	<i>synoviolin</i>		
		+/+	+/-	-/- (alive) (dead)
Postnatal	10 (2)	2	8	0
E18.5	3 (1)	3	0	0
E17.5	4 (1)	0	4	0
E15.5	5 (1)	1	4	0
E14.5	50 (8)	22	22	0 6
E13.5	81 (13)	27	47	2 5
E12.5	104 (17)	26	67	10 1
E11.5	35 (5)	8	18	8 1
E10.5	26 (4)	8	12	6 0
Total	318 (51)	97	182	39

FIG. 3 PHENOTYPES OF SYNOVIOLIN KO MICE



13.5 d.p.c.
($\times 10$)

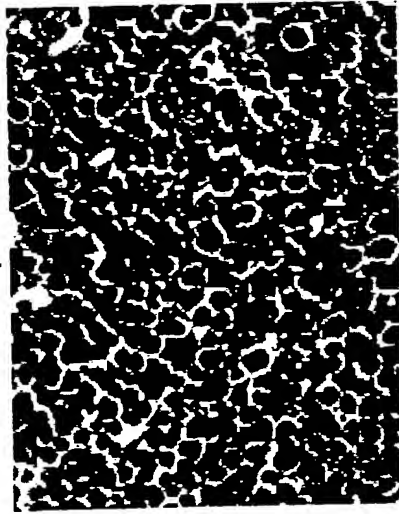


HE STAINING
($\times 12.5$)

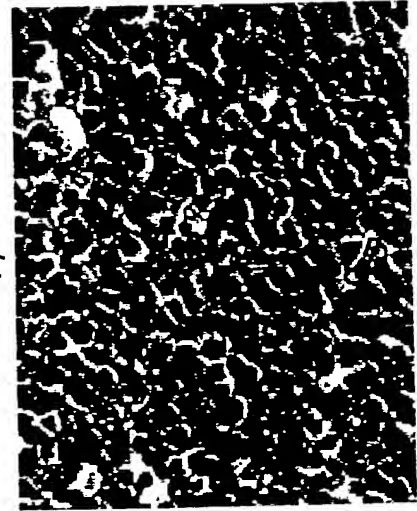
FIG. 4 PHENOTYPES OF SYNOVIOLIN KO MICE
(HE STAINING)

Liver ($\times 400$)

$+/+$



$+/+$



$-/-$

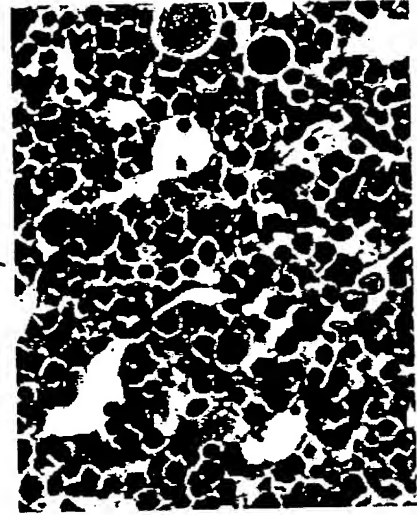


FIG. 5 KO MICE EXPERIENCING EMBRYONIC DEATH AT AROUND E13.5

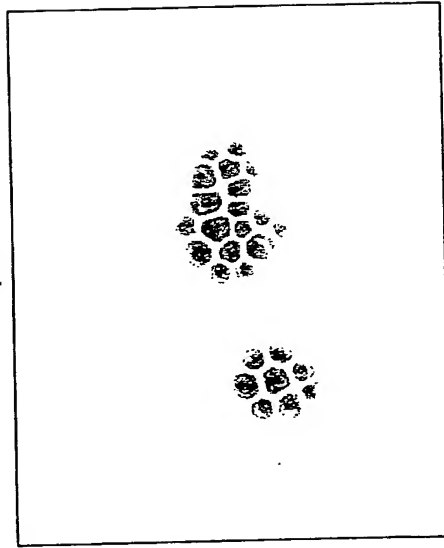
Gene	Stage	Phenotype
AML1	E12.5	Abnormal secondary hematopoiesis in fetal liver
Angiopoietin-1	E12.5	Abnormal cardiovascular system
bcl-x	E13.0	Cell death in the peripheral ganglia, and increased cell death of immature hematopoietic cells in fetal liver
cas	E11.5-12.5	Congestion due to systolic dysfunction of vascular smooth muscles, and cardiac hypoplasia
EKLF	up to E13.0	Extreme anemia
EPO	E13.0	Abnormal secondary hematopoiesis in fetal liver
EPOR	E13.0	Abnormal secondary hematopoiesis in fetal liver
c-jun	E11.5-15.5	Increase of nucleated erythrocytes in fetal liver
keratin-8	E12.0-15.5	Increase of nucleated erythrocytes in fetal liver
c-myb	E15.5	Abnormal secondary hematopoiesis in fetal liver
RB	E12.0-16.0	Abnormal central nervous system, and abnormal hematopoietic system
sox4	E14.0	Cardiac malformation
Tie-1	E13.5-14.5	Abnormal maintenance of vascular cells
VCAM-1	E11.5-12.5	Placental and cardiac malformation

Excerpt from Knockout Mice Data Book

FIG. 6 INVESTIGATION OF PRIMARY
HEMATOPOIESIS (Giemsa staining)

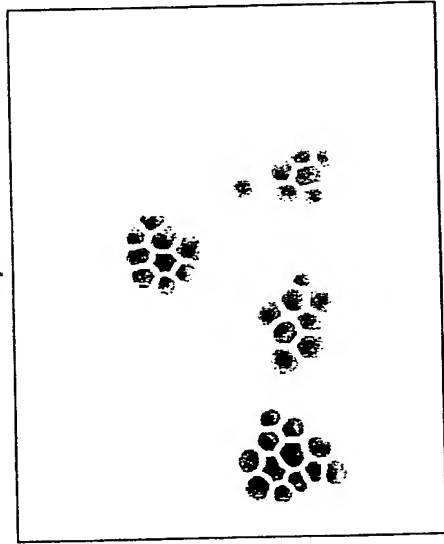
10.5 d.p.c.

+/+



Peripheral
blood ($\times 100$)

+/-



-/-

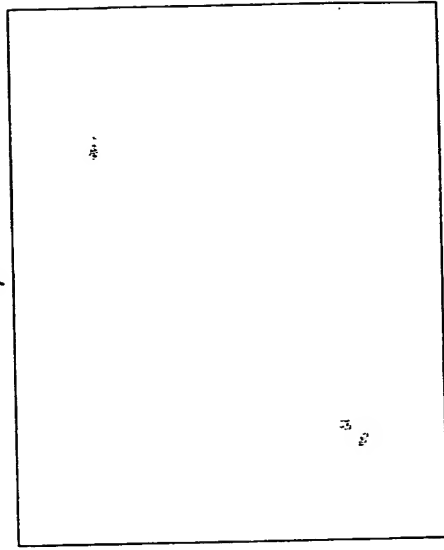
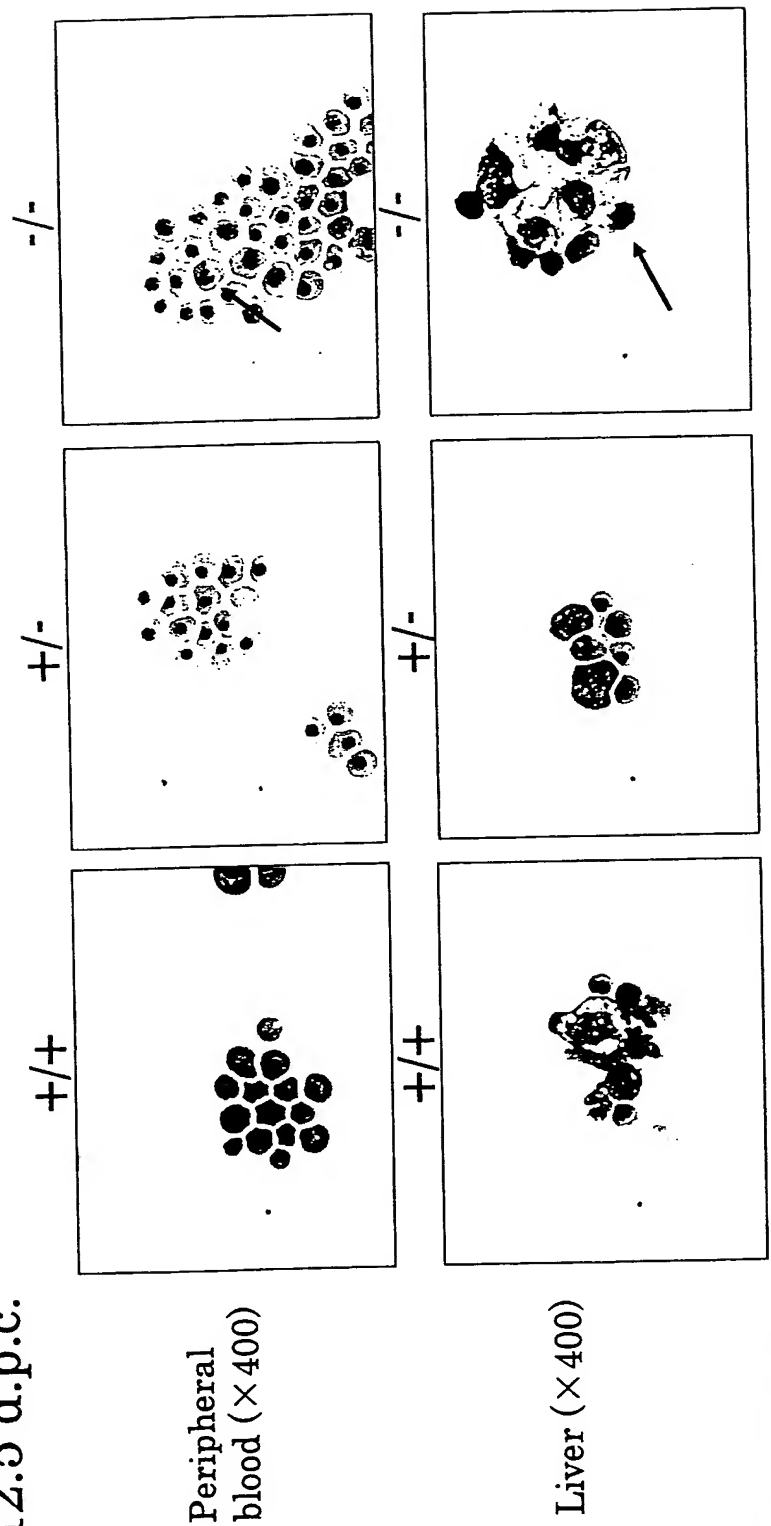


FIG. 7 INVESTIGATION OF SECONDARY
HEMATOPOIESIS (Giemsa staining)

12.5 d.p.c.



Erythroblast morphology	+/+	+/-	-/-
Nuclear disruption	0.0%	0.6%	2.0%
Binucleation	0.1%	1.2%	2.1%
Howell-Jolly body	1.7%	3.8%	6.4%

M ϕ phagocytosis image	+/+	+/-	-/-
(cells/ 100 M ϕ)	1	7	22

FIG. 8 HEMOPHAGOCYTOSIS IN SYNOVIOLIN KO MICE

Liver ($\times 400$)

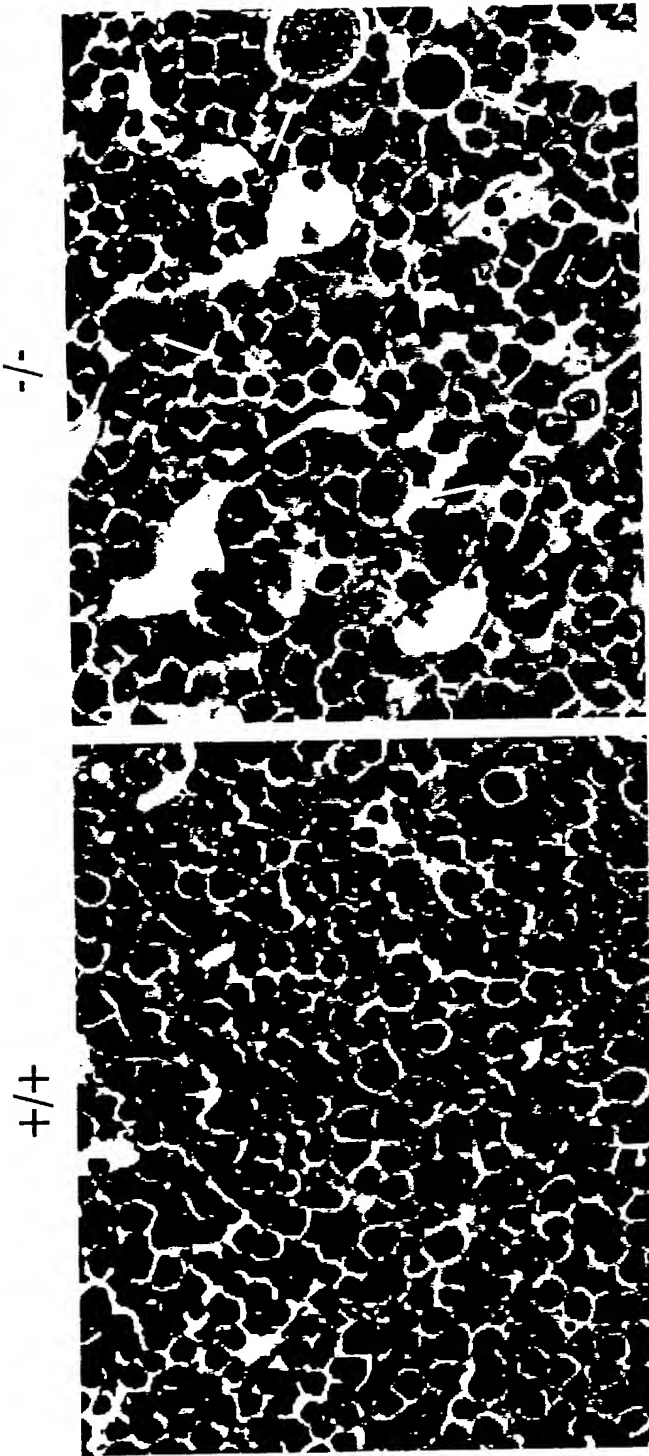


FIG.9

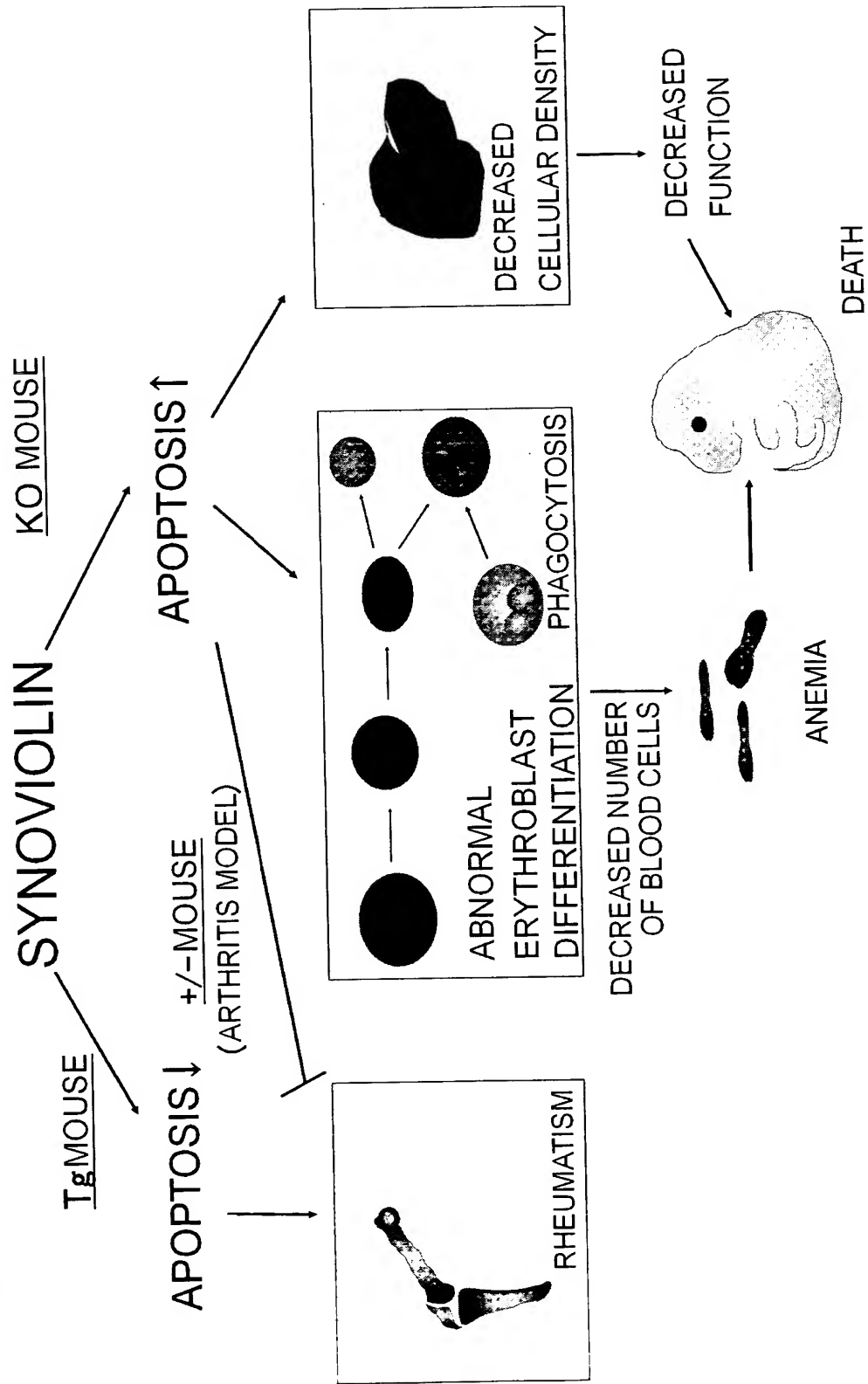


Table 1**Table 1. Genotypes of Offsprings from *syno*^{+/-} Intercrosses**

Stage	Total (Litters)	<i>syno</i>			
		+/+	+/-	-/- (alive)	(dead)
Postnatal	10 (2)	2	8	0	
E18.5	3 (1)	3	0	0	
E17.5	4 (1)	0	4	0	
E15.5	5 (1)	1	4	0	
E14.5	50 (8)	22	22	0	6
E13.5	81 (13)	27	47	2	5
E12.5	104 (17)	26	67	10	1
E11.5	35 (5)	8	18	8	1
E10.5	26 (4)	8	12	6	0
Total	318 (52)	97	182	39	

Surviving embryos were defined as those with beating hearts at time of dissection.

Figure.1

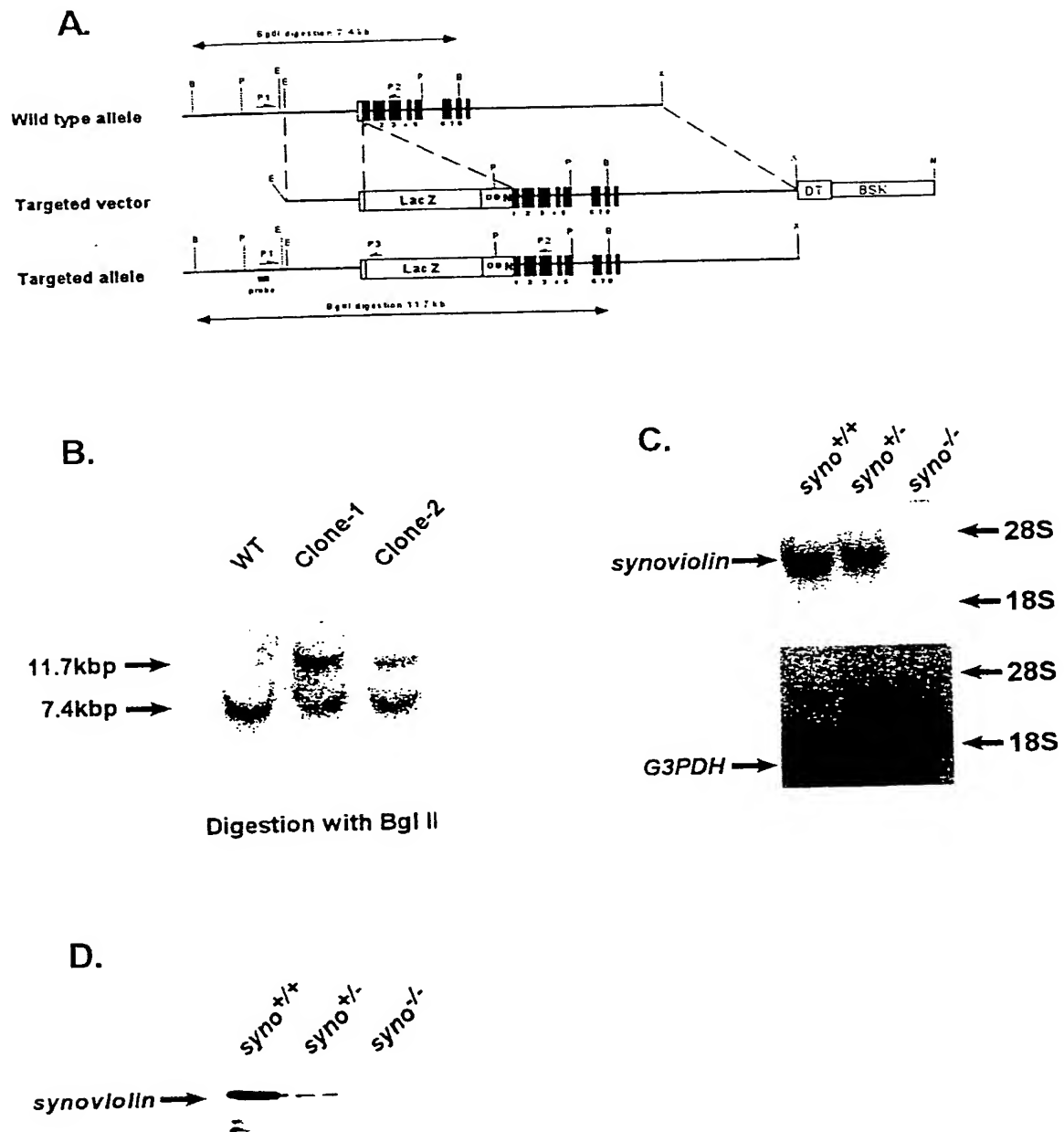


Figure.2

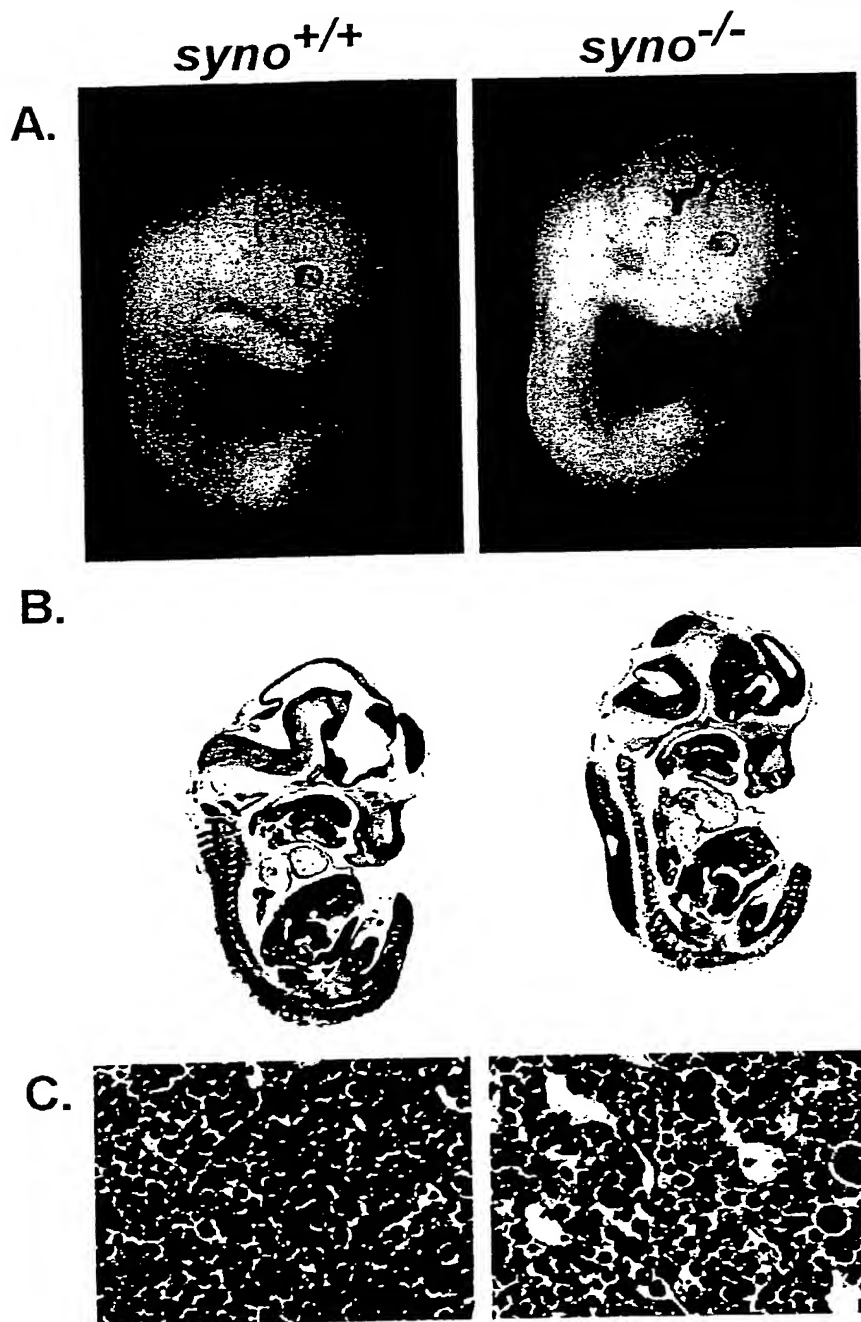


Figure.3



Figure.4

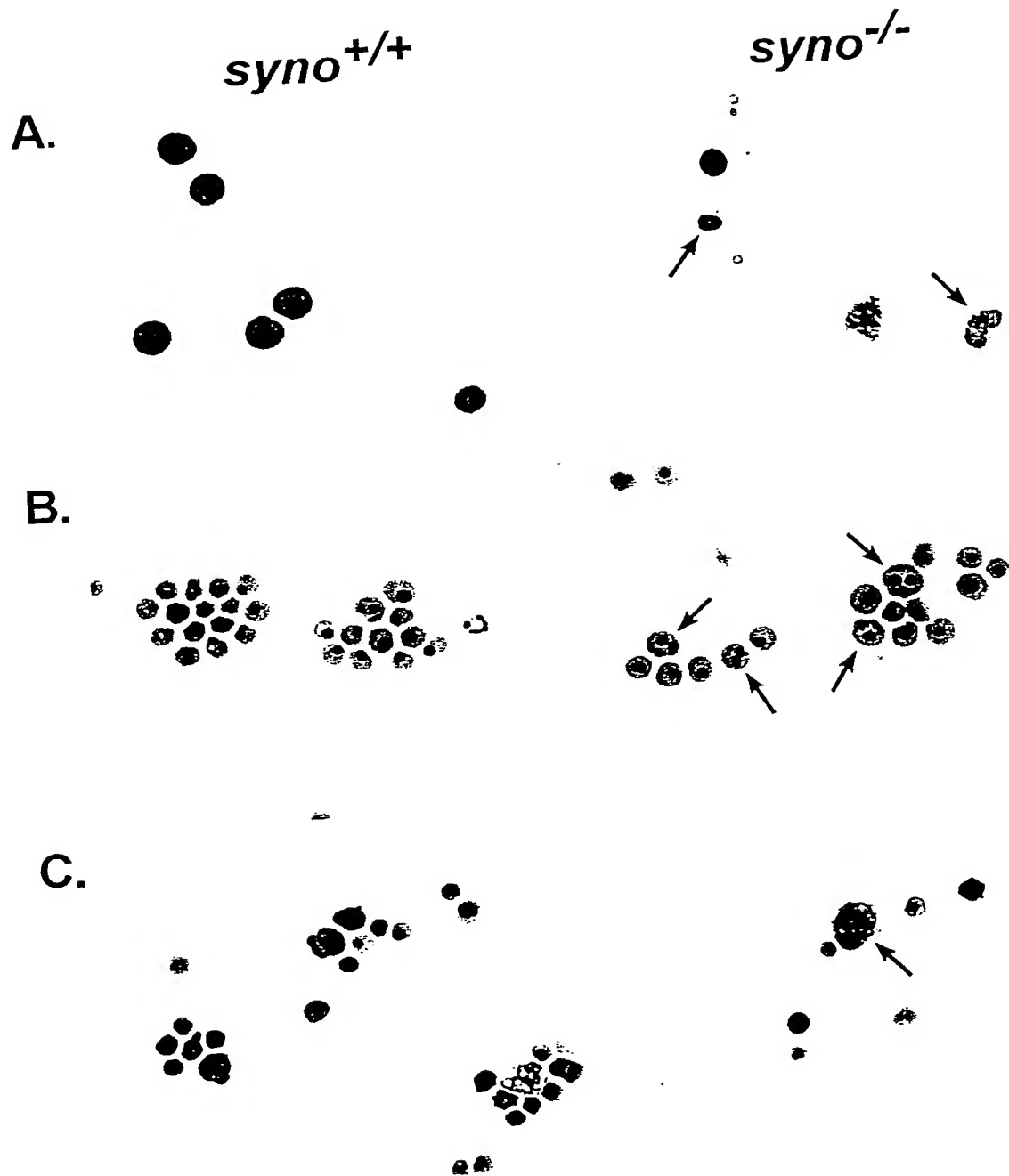


Figure.5

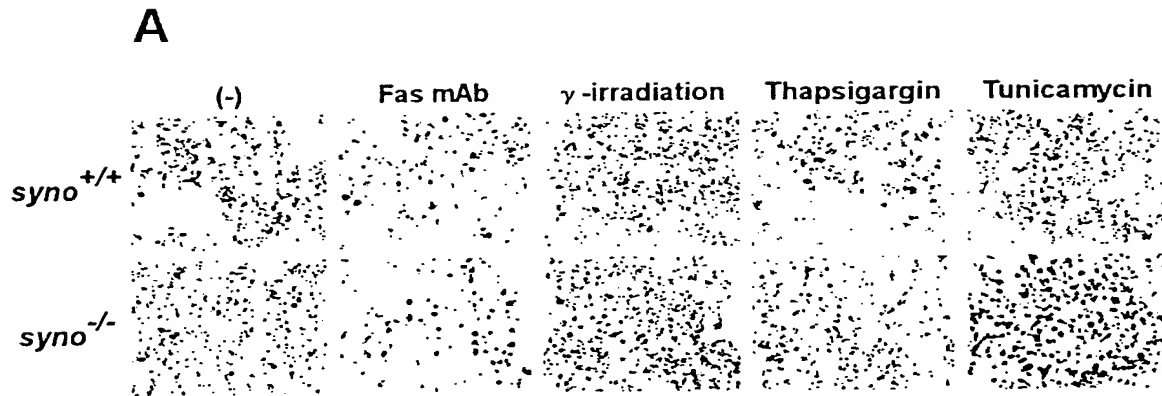
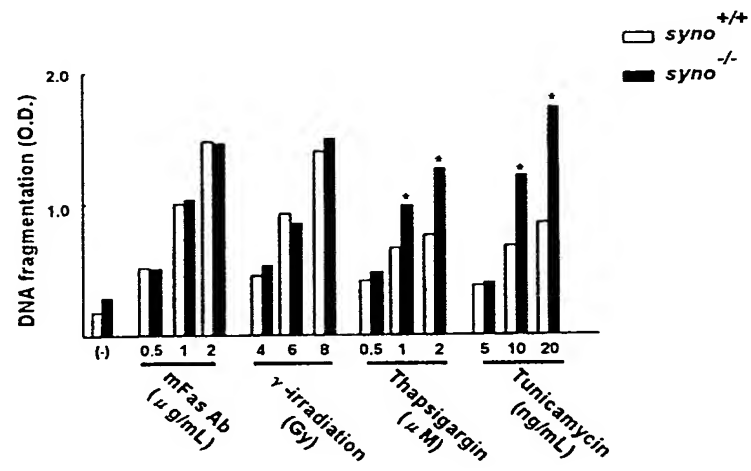
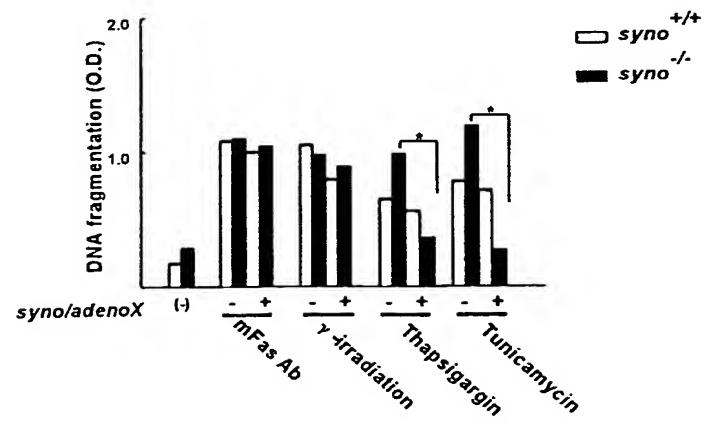
**B****C**

Figure.6

